

ABSTRACT OF THE DISCLOSURE

A multiprocessor computing machine is adapted to execute processes concurrently without interrupt to improve system throughput. The respective processors maintain local clocks initialized by a scheduler program to determine how long each process can execute without interrupt. Expiry of the local clock generates a hardware interrupt that switches out the process unless lock has been declared by the process. A process that is enabled to declare lock may continue to process for a predetermined period of time. A timer queue is also managed without interrupt. System resources are thereby conserved and throughput is improved.